

2026

AI



March Revision



Programming

And AI

FIRST SECONDARY

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① Put (✓) or (X) :

1. TCP retransmits lost packets to ensure accuracy. ()
2. Packets can travel through different paths to the same destination. ()
3. Artificial Intelligence understands meaning exactly like humans. ()
4. A file server deals only with printers. ()
5. The background-color property is responsible for the background color. ()
6. In a peer-to-peer system, each device can act as both a server and a client. ()
7. The hierarchical database is based on representing data in a network-like structure. ()
8. An algorithm is a set of ordered steps used to solve a problem in a clear and defined way. ()
9. The color of all paragraphs on a web page can be changed by modifying a single CSS file. ()
10. Packet Switching allows multiple users to share the same path. ()
11. Generative AI cannot be used in education. ()
12. Deleting a column using Projection does not affect the original data. ()
13. A variable name can start with a number without any problem. ()
14. A domain name makes it easier for humans to deal with the network instead of using numbers. ()
15. The <h1> tag is used to display main headings. ()
16. A Join operation can be performed without a logical relationship between tables. ()
17. A Join operation can be performed without a logical relationship between tables. ()
18. A DNS server is responsible for translating domain names into IP addresses and vice versa. ()
19. Selection depends on conditions to filter rows. ()
20. Routing means determining the best path for data transmission. ()
21. Generative AI outputs can be relied upon as 100% certain sources. ()
22. IPv6 was introduced to solve the problem of address exhaustion. ()
23. A variable is used to store a value that can change during program execution. ()
24. A database is a collection of organized data stored in a way that allows easy access for specific purposes. ()
25. Prompts directly affect the quality of results. ()
26. CSS is responsible for designing and formatting the page. ()
27. Data availability includes recovery plans after failures. ()
28. An IP address is a unique identifier assigned to each device connected to the Internet. ()
29. The term record refers to columns in a relational database. ()
30. Generative AI relies only on storing data without analyzing it. ()
31. IPv4 uses 32 bits. ()



32. A good algorithm may produce different results for the same inputs each time. ()
33. In a client-server system, the client cannot provide services. ()
34. The <link> tag can be used to connect a CSS file to a web page. ()
35. A table in a database consists of rows (records) and columns (fields). ()
36. NoSQL is used only for structured data in tables. ()
37. A hub sends data to all devices without distinction. ()
38. Generative AI can be used to create new texts and ideas. ()
39. CSS cannot affect text within a page. ()
40. A Local Area Network (LAN) connects devices within a limited area such as a school or home. ()
41. JavaScript is used to add interactivity to web pages. ()
42. IP is responsible for ordering packets after reception. ()
43. The <p> tag is used to display images inside a web page. ()
44. A LAN can operate without an Internet connection. ()
45. An Internet Service Provider (ISP) is the company that facilitates Internet access. ()
46. Data consistency is related to preventing conflicts between operations on the same data. ()
47. Generative AI can be used to generate questions in different formats. ()
48. A router directs data between different networks. ()
49. HTML is used to design the appearance of a web page (colors and fonts). ()
50. The Projection operation reduces the number of rows in a table. ()
51. Data independence allows modifying the database structure without affecting programs. ()
52. An algorithm can be represented using flowcharts to illustrate the sequence of steps. ()
53. A packet contains only data without additional information. ()
54. Choosing a proper variable name helps in understanding the code better. ()
55. Packets may arrive in a different order than they were sent. ()
56. WLAN uses cables instead of radio waves. ()
57. Generative AI relies on probabilistic modeling rather than true understanding. ()
58. More than one class can be applied to the same element. ()
59. The transport layer is responsible for routing between networks. ()
60. A program is a set of instructions written to perform a specific task. ()
61. An IPv4 address is represented in five groups separated by dots. ()
62. AI cannot be used in programming. ()
63. Creating relationships between tables aims to increase data redundancy for easier access. ()
64. A mail server is used to send and receive emails. ()



65. Generative AI relies on predicting the next word based on context. ()
66. The color property in CSS controls the background color. ()
67. WAN is used only within small organizations. ()
68. Two devices on the Internet can have the same global IP. ()
69. TCP/IP protocol is used to control sending and receiving data over the Internet. ()
70. The Internet is a network that connects LANs and WANs globally. ()
71. Programming is limited to running ready-made programs on a computer. ()
72. A class can be used to apply different designs to similar elements. ()
73. A private IP can be reused within different networks. ()
74. The more data a model is trained on, the better the results. ()
75. TCP/IP consists of multiple layers, each with a specific function. ()
76. A DBMS is responsible for creating, operating, and managing databases. ()
77. Circuit Switching is more efficient than Packet Switching. ()
78. An algorithm must be tested before converting it into a program to ensure correctness. ()
79. An external CSS file cannot be linked to an HTML page. ()
80. A relational database depends on relationships between tables. ()
81. Generative AI helps improve productivity and save time. ()
82. Not creating relationships between tables may lead to data redundancy. ()
83. Generative AI can be used to summarize texts and generate ideas. ()
84. A computer network connects only computers and does not include smartphones. ()
85. Data integrity aims only to prevent redundancy without ensuring correctness. ()
86. A Join operation can produce a table containing data from more than one table. ()
87. getElementById is used to access an element using its id. ()
88. DNS is used only to store websites. ()
89. A primary key is a unique field whose value cannot be duplicated within the same table. ()
90. The accuracy of generative AI depends on the size and quality of training data. ()
91. Comments in programming are executed with the code during runtime. ()
92. Deleting a record always automatically deletes all related relationships. ()
93. Generative AI can create images in addition to text. ()
94. In UDP protocol, delivery of data is not guaranteed. ()
95. A table can have more than one primary key at the same time. ()



96. An id in HTML must be unique within the page. ()
97. A single field in a database can contain multiple values at the same time. ()
98. TCP can request retransmission of lost packets. ()
99. In JavaScript, a function can be called multiple times without rewriting the code. ()
100. A web page design can be modified using CSS without changing the HTML content. ()

② Choose the correct answer :

1. What is meant by a computer network ?

- a) A program for storing data.
- b) A group of connected devices to exchange data.
- c) An output device.
- d) An operating system.

2. Which of the following is an example of a Local Area Network (LAN) ?

- a) The Internet.
- b) An international network.
- c) A network of devices within a single building.
- d) A satellite network.

3. Which of the following is considered a wireless communication medium ?

- a) Fiber optic cable.
- b) Copper cable.
- c) Wi-Fi.
- d) Ethernet.

4. Which connection type features the highest data transfer speed ?

- a) Coaxial cable.
- b) Bluetooth.
- c) Infrared.
- d) Fiber optics.

5. What is the function of an IP address ?

- a) Identifying the website name.
- b) Identifying the location of a device on the network.
- c) Increasing internet speed.
- d) Data protection.

6. An IPv4 address consists of :

- a) 2 numbers only.
- b) 4 groups of numbers.
- c) 6 groups of letters.
- d) One long number.

7. A network that covers a large geographical area is called :

- a) LAN
- b) MAN
- c) PAN
- d) WAN

8. In a Peer-to-Peer model, devices are :

- a) Linked to a main server.
- b) Unable to share files.
- c) Equal in permissions/privileges.
- d) Connected to the internet only.

9. Bluetooth technology is most commonly used for :

- a) Global networks.
- b) Connecting short-range devices.
- c) Communication via cables.
- d) Server networks.

10. One of the disadvantages of wireless communication is :

- a) Ease of use.
- b) Flexibility.
- c) Low cost.
- d) Susceptibility to interference (noise).

11. Which of the following is a correct example of an IP address ?

- a) www.google.com
- b) 192.168.1.1
- c) google@com
- d) http://site



12. What is the benefit of Domain Names ?

- a) Replacing an IP address with an easy-to-remember name.
- b) Data encryption.
- c) Increasing storage capacity.
- d) Preventing internet connection.

13. Which network model relies on a central main server ?

- a) Peer to Peer
- b) LAN
- c) Client / Server
- d) PAN

14. One of the benefits of using networks is :

- a) Increasing data size.
- b) Sharing resources and information.
- c) Reducing device efficiency.
- d) Preventing data exchange.

15. Which of the following is a wired communication method ?

- a) Wi-Fi
- b) Bluetooth
- c) Infrared
- d) Fiber optic cable

16. Wired connection is preferred because it is :

- a) Less secure.
- b) Slow.
- c) More stable and secure.
- d) Affected by interference.

17. Which of the following is a Domain Name ?

- a) 172.16.0.1
- b) 255.255.255.0
- c) www.moe.gov.eg
- d) 10.0.0.5

18. The server responsible for converting a domain name into an IP address is :

- a) Web Server
- b) File Server
- c) DNS Server
- d) Mail Server

19. What is meant by a communication protocol ?

- a) A device to strengthen the network.
- b) A set of rules that govern the exchange of data.
- c) A web browsing program.
- d) A type of cable.

20. Which protocol is used for communication over the Internet ?

- a) HDMI
- b) USB
- c) TCP/IP
- d) VGA 3.

21. A database is :

- a) A collection of unordered files.
- b) A word processing program.
- c) An external storage device.
- d) An organized collection of data.

22. The primary goal of using databases is :

- a) Data redundancy (repetition).
- b) Difficulty in accessing information.
- c) Ease of storing and retrieving data.
- d) Increasing file sizes.

23. The IP protocol is responsible for :

- a) Encrypting data.
- b) Identifying the device address on the network.
- c) Displaying web pages.
- d) Sending emails.

24. The importance of communication protocols lies in being :

- a) Optional.
- b) Used in small networks only.
- c) Essential for successful communication between devices.
- d) Responsible for increasing data size.



25. A Database Management System (DBMS) is :

- a) A computer hardware.
- b) A programming language.
- c) A software program to manage databases.
- d) An operating system.

26. Which of the following is an example of a Database Management System ?

- a) Microsoft Access b) Google Chrome
- c) Microsoft Word d) Windows

27. The TCP protocol is responsible for :

- a) Identifying the device address.
- b) Ensuring data arrives complete and in order.
- c) Translating domain names.
- d) Encrypting data.

28. Which statement is true regarding communication protocols ?

- a) They differ from one user to another.
- b) They are unnecessary in networks.
- c) They organize the communication process between devices.
- d) They are used in computers only.

29. Which of the following is an example of a database ?

- a) A picture. b) A video.
- c) An organized data table. d) An audio file.

30. One of the advantages of databases is :

- a) Difficulty in updating data.
- b) Information redundancy.
- c) Easy loss of data.
- d) Speed of searching and editing.

31. What is meant by a Table in a database ?

- a) A group of programs
- b) A collection of related records
- c) An image file
- d) A storage device

32. A column in a database table is called a :

- a) Record b) Field c) Key d) Form

33. A row in a database table is called a :

- a) Field b) Form c) Record d) Query

34. Which of the following is used to distinguish between records within a table ?

- a) Field b) Form c) Primary Key d) Query

35. The Primary Key is :

- a) A field that repeats in the table
- b) A field that uniquely identifies each record
- c) A data entry form
- d) A search query

36. Which of the following is an example of a field in a Students table ?

- a) Students' data b) A single student
- c) Seat number (ID) d) Results table

37. What is the function of Forms in databases ?

- a) Storing data
- b) Easily entering and viewing data
- c) Deleting tables
- d) Creating networks

38. Which element is used to display data in an organized manner on the screen or for printing ?

- a) Table b) Report c) Primary Key d) Field



39. Which of the following is an example of a record ?

- a) Name column
- b) A row containing one student's data
- c) Table name
- d) Data type

40. The appropriate data type for storing a name is :

- a) Number b) Date c) Text d) Logical (Boolean)

41. One of the conditions for a Primary Key is that it must be :

- a) Repeatable
- b) Sometimes empty (Null)
- c) Unique and non-repeatable
- d) Text type only

42. Reports are used for :

- a) Entering data
- b) Modifying tables
- c) Displaying data in a formatted layout
- d) Creating databases

43. What is meant by an "Algorithm" ?

- a) A programming language
- b) A computer device
- c) A set of ordered steps to solve a problem
- d) A ready-made software

44. One characteristic of a correct algorithm is being :

- a) Unordered
- b) Infinite (no defined end)
- c) Clear and specific
- d) Dependent on a specific device

45. Which of the following is an example of an algorithm ?

- a) Turning on a computer
- b) Steps for making a cup of tea
- c) A keyboard
- d) An operating system

46. Algorithms are usually written using :

- a) Images only b) Sounds
- c) Verbal or symbolic steps d) Input devices

47. The first step when solving any problem using algorithms is :

- a) Writing the program
- b) Understanding the problem
- c) Testing the solution
- d) Executing the solution

48. A condition for a good algorithm is that it must have :

- a) Complexity b) Non-executability
- c) A start and an end d) Very long length

49. Which of the following is NOT a benefit of algorithms ?

- a) Organizing thoughts
- b) Making programming easier
- c) Increasing solution errors
- d) Solving problems systematically

50. An algorithm can be represented using :

- a) Flowcharts b) Keyboard
- c) Mouse d) Monitor

51. The correct order of algorithm steps must be :

- a) Random b) Unclear
- c) Logical and sequential d) Always changing



52. Which of the following is used to represent an algorithm graphically ?

- a) A table
- b) A flowchart
- c) A database
- d) A text file

53. A good algorithm should provide :

- a) Always the same result for the same inputs
- b) Different results
- c) Unknown results
- d) Random results

54. Before converting an algorithm into a program, you must :

- a) Turn on the computer
- b) Test the algorithm
- c) Delete the steps
- d) Change the problem

55. What is meant by Programming ?

- a) Using a computer
- b) Writing commands in a language the computer understands
- c) Running programs
- d) Browsing the Internet

56. A Program is :

- a) An electronic device
- b) A set of instructions that perform a specific task
- c) An image file
- d) A database

57. A Programming Language is :

- a) Human language
- b) A means of communication between the user and the computer
- c) A set of rules for writing computer commands
- d) An operating system

58. One of the benefits of learning programming is :

- a) Increasing the size of the device
- b) Solving problems in an organized way
- c) Reducing computer speed
- d) Preventing Internet use

59. Which of the following is an example of a programming language ?

- a) Windows
- b) Python
- c) Google
- d) Excel

60. A Programmer is a person who :

- a) Only uses a computer
- b) Writes programs using a programming language
- c) Repairs computer hardware
- d) Manages networks

61. Before writing a program, you must :

- a) Turn on the computer
- b) Understand the problem well
- c) Save the data
- d) Install the system

62. The next step after writing a program is :

- a) Understanding the problem
- b) Executing and testing the program
- c) Shutting down the computer
- d) Deleting the code

63. A programming language is used to :

- a) Write letters
- b) Give commands to the computer
- c) Draw pictures
- d) Store files only

64. A good program should be :

- a) Complex
- b) Unclear
- c) Error-free (Bug-free)
- d) Very long



65. Which of the following is NOT a programming language ?

- a) Java b) Python c) HTML d) Windows

66. Program testing aims to :

- a) Increase code size
b) Discover and correct errors (Debugging)
c) Delete commands
d) Change the programming language

67. A variable in programming is used to :

- a) Start the computer
b) Store a value that can be changed
c) Write texts d) Design pages

68. Generative AI relies on :

- a) Storage only
b) Probabilistic modeling and prediction
c) Manual input
d) Traditional programming only

69. The language responsible for building the structure of a web page is :

- a) CSS b) JavaScript c) HTML d) Python

70. CSS is used for :

- a) Running the server
b) Designing the layout/appearance of the web page
c) Storing data
d) Writing text only Choose the correct

71. Assigning a value to a variable means :

- a) Deleting the variable
b) Giving the variable a specific value
c) Printing the variable
d) Running the program

72. Generative AI does NOT rely on :

- a) Big Data b) Statistical prediction
c) Real human consciousness/perception
d) Learning from data

73. The <h1> tag is used to represent :

- a) A text paragraph b) An image
c) A main heading d) A link

74. Which property is used to change text color ?

- a) font-size b) background
c) color d) border

75. Which of the following is a valid variable name ?

- a) 1name b) name-1
c) name1 d) name space

76. An example of a Generative AI tool is :

- a) Microsoft Word b) ChatGPT
c) Excel d) Paint

77. The <p> tag is used to display :

- a) An image b) A heading
c) A text paragraph d) A table

78. An external CSS file is linked to an HTML page using :

- a) <style> b) <script> c) <link> d) <meta>

